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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,741	08/01/2003	John Frederick Ackerman	RD-26408-5	3858
7590	08/10/2005		EXAMINER	
John S. Beulick Armstrong Teasdale LLP Suite 2600 One Metropolitan Square St. Louis, MO 63102			PERRIN, JOSEPH L	
			ART UNIT	PAPER NUMBER
			1746	
			DATE MAILED: 08/10/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/632,741	ACKERMAN ET AL.	
	Examiner	Art Unit	
	Joseph L. Perrin, Ph.D.	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 June 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 6,7,9-12 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) _____ is/are rejected.
- 7) Claim(s) 17 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Response to Arguments

1. In response to applicant's response filed 06 June 2005, the status of the application is as follows:

2. Applicant's arguments regarding the rejection under 35 U.S.C. §112, first paragraph, have been fully considered but they are not persuasive.

Applicant argues that either a first or a second fluid may be an "anti-static fluid". However, applicant's arguments are not commensurate in scope with the original disclosure. The Examiner cannot find anywhere in the original disclosure as filed where such scope of enablement is located. Applicant is urged to particularly point out where in the original disclosure (as filed) where either the first or second fluid may be an anti-static fluid and/or a water-based cleaning solution.

Applicant further argues that the specification discloses the anti-static liquid "facilitates suppressing electrostatic attraction of the blades" and, therefore, "one skilled in the art would not need to perform undue experimentation to determine what constitutes an anti-static liquid, but rather could duplicate the invention using any liquid that neutralizes particles dependent upon electrostatic attraction". The Examiner disagrees. Simply stating a potential property (if "facilitating" can even be construed as a property) of a liquid does not satisfy the enablement requirement of what liquids may or may not include such potential property. Virtually any liquid may or may not "facilitate" suppressing electrostatic attraction, including water. Applicant's disclosure is textually

silent with respect to what liquids, out of the vast number of potential liquids, would read on an "anti-static" liquid. Moreover, applicant's disclosure is textually silent with respect to any tests or measures of how to determine whether or not a liquid reads on the claimed "anti-static" liquid. Applicant is reminded of 35 U.S.C. §112, first paragraph, which states:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention. (emphasis added)

Applicant's disclosure does not comply with an adequate disclosure of "anti-static" liquids in full, clear, concise, and exact terms in accordance with the statute.

In addition, applicant argues that working examples of anti-static liquids are disclosed, citing "a water-soluble, anti-static liquid, such as an antistatic agent commercially available from Dongnam Chemical Industries, Ltd., Inchon, Korea". The Examiner disagrees that such disclosure meets the provision of a working example since applicant is silent with respect to a single working example. It appears applicant attempting to provide some type of "incorporation by reference" with regard to listing particular species of an "anti-static" liquid. Even if, *arguendo*, one were to interpret the chemical company as being enabling for the broadly claimed "anti-static" liquid, it is still unclear as to the scope of what liquids would or would not read on applicant's claimed invention. Moreover, regarding the scope of the invention at the time the invention was made, it is unclear whether the chemical company has produced more "anti-static" liquids than previously offered at the time of invention of applicant and which may have not been contemplated by applicant at time of invention? Is applicant limited to the

disclosed “anti-static” liquid offered by the chemical company? Such concerns raise issues of enablement of the claimed “anti-static” liquid.

3. Applicant's arguments regarding the rejection under 35 U.S.C. §112, second paragraph, are persuasive in view of the amendment to the claims. Accordingly, this rejection is withdrawn.

4. Applicant's arguments regarding the rejection under 35 U.S.C. §102 over HODGENS have been fully considered but they are not persuasive.

The rejection of claims 6-7 & 9-16 are maintained for reasons of record. Namely, applicant repeats the argument that the prior art references do not inject an “anti-static liquid” or a “liquid to reduce a rate of formation of particulate matter” and. Firstly, applicant's disclosure is not enabled for such a liquid (i.e. does not disclose a single species...what liquids read on this limitation?). Moreover, a liquid “that facilitates reducing a rate of formation of particulate matter” is anticipated by virtually any liquid capable of performing such function since such language is considered intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In the instant case, HODGENS discloses various additives in combination with the use of a cleaning composition for turbine engines, including

chelating agents. As best understood in view of the issues of enablement (cited above), the chelating agents and/or surfactant compositions ammonium sulfamate (AS), sulfamide (S), and hydroxylamine-o-sulfonic acid (HOSA) are fully capable of performing such function and therefore read on applicant's apparatus claims.

5. Applicant's arguments regarding the rejection under 35 U.S.C. §102 over BARTOS have been fully considered but they are not persuasive.

Similarly regarding HODGENS, applicant's arguments regarding an "anti-static" liquid are not persuasive for at least the reasons indicated above. The preservative coating of BARTOS reads on applicant's "anti-static" liquid since such coating is fully capable of performing the intended use function claimed by applicant.

Claim Objections

6. Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 17 depends from a canceled claim and therefore fails to further limit a previous claim.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 6-7, 9-12 & 14-16 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a wash system having a first fluid being a cleaning fluid and a second fluid "configured to facilitate reducing a rate of formation of particulate matter" (i.e. an anti-static liquid), does not reasonably provide enablement for a wash system having a first and second fluid wherein one of said first and second fluids comprises an anti-static liquid. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. Applicant's original disclosure includes a washing system having a first fluid which is a cleaning fluid (i.e. for washing). Applicant's disclosure further discloses a second fluid as an anti-static liquid. Thus, applicant's original disclosure is not enabled for a first fluid being an anti-static fluid. Moreover, applicant's original disclosure is not enabled for a second fluid "configured to facilitate reducing a rate of formation of particulate matter (i.e. anti-static liquid) and/or a first fluid being an anti-static liquid. Applicant's disclosure is silent with respect to species which read on such limitations.

9. Claims 6-7, 9-12 & 14-16 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The different species of liquids defining "anti-static" critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Claim 6 recites a first fluid "is an anti-static liquid". This encompasses any liquid which has that ability. However, the specification does not provide guidance with respect to any working examples (species) of anti-static liquids.

Furthermore, the specification fails to provide guidance as to how to obtain such measurements for anti-static properties so as to define the meets and bounds of patent protection sought, apparently attempting to improperly incorporate by reference such anti-static liquids as commercially available. What liquids constitute an “anti-static liquid”? Without such information on what species of liquids fall within the scope of applicant’s broad “anti-static liquid”, one of ordinary skill in the art could not predict which liquids out of the vast number of known liquids would have anti-static properties and, accordingly, one of ordinary skill in the art would be required to perform undue experimentation to identify whether a liquid would have “anti-static” properties even though no threshold (*i.e.* “anti-static” measurement and/or range) is disclosed.

Therefore, one skilled in the art could not make and/or use the invention.

Claim Rejections - 35 USC § 102

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
11. Claims 6-7, 9-12 & 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,713,120 to Hodgens. Re claims 6-7 & 9-10, Hodgens discloses a gas turbine wash system (11) with a pump (compressor 14) connected to a nozzle (spray probe 20) and fluid reservoirs (12/13) (see col. 5, lines 3-14). Re claim 9, Hodgens further discloses injecting fluids from both reservoirs (12/13), which reads on applicant’s limitation of the system being “configured to inject a first fluid and a second fluid...” (see col. 5, lines 44-55). Re claims 11 & 12, Hodgens teaches that it is known

to clean internal parts of gas turbine engines including compressors (see col. 1, lines 53-64). As best understood in view of the enablement rejection above, the limitations directed to the types of fluids ("anti-static liquid [that] facilitates reducing a rate of formation of particulate matter...") are considered intended use and given little weight in the apparatus claims. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Ex parte Masham, 2 USPQ2d 1647 (1987). In the instant case, the claims language "said washing system configured to inject a first fluid and second fluid" merely requires the system to be capable of injecting the fluids since the fluids are not positively recited limitations in the apparatus. Thus, limitations directed to the fluids not positively recited are given little weight and only require the apparatus to be capable of holding/using such fluids (which Hodgens clearly discloses, as noted above). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959).

"[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (emphasis in original) It has further been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. As noted above, "anti-static liquid" is positively recited but is considered non-enabling (see above rejection under 35 U.S.C. §112, first paragraph).

As best understood, the disclosure is construed to read on a coating liquid which would be capable of reducing the rate of formation of particulate matter. Accordingly, since the chelating agents of Hodgens (see chelating agents such as EDTA, col. 4, lines 10-40) would be capable of reducing the rate of formation of particulate matter (*i.e.* a coating would achieve this since the coating would prevent adhesion of particles to, for instance, a gas turbine), the apparatus of Hodgens reads on applicant's claimed apparatus. Similarly re claims 12-14, since the fluid limitations are directed to intended use (*i.e.* "for injecting a fluid"), the limitations directed to the configuration of the fluids is considered intended use and given little weight. Re claims 15-16, these claims are directed to intended use (*i.e.* when the fluid is injected during a cleaning/treating operation) and given little patentable weight. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Recitation of Hodgens reads on applicant's claimed invention.

12. Claims 6-7, 9-12 & 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,059,123 to Bartos. Similar to Hodgens cited above, Bartos discloses the claimed structure of a turbine engine cleaning machine (10) including a pump (compressor 14), fluid reservoirs (18/20/22/24), and nozzle manifold (96) (see Figures 1, 2, 6, and relative associated text). As noted above, the non-enabling disclosure of "anti-static liquid" is construed to read on a coating liquid which would be

capable of reducing the rate of formation of particulate matter, and the intended use of types of fluids used and operation of the apparatus are given little weight (*see above*). Accordingly, since the preservative coating of Bartos would be capable of reducing the rate of formation of particulate matter (*i.e.* a coating would achieve this since the coating would prevent adhesion of particles to, for instance, a gas turbine), the apparatus of Bartos reads on applicant's claimed apparatus. Recitation of Bartos reads on applicant's claimed invention.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is

(571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1746

jlp